

REMARKS:

This Amendment is in response to the Office Action dated December 1, 1997.

Claims 1-15 are pending in the present application. Claims 1, 3, 8, 10 and 15 have been amended, claims 2 and 9 have been canceled, and claims 16-18 have been added to more particular claim the subject matter of the present invention. Claims 1, 3-8, and 10-18 remain pending.

The title of the invention has been amended to be more indicative of the invention, as requested by the Examiner. The title now indicates the present invention is "A Method And System For Displaying Images And Associated Multimedia Types In The Interface Of A Digital Camera."

The specification has been amended to correct various informalities and to cancel incorporation by references to non-essential information pursuant to MPEP 608.01(P). Claims 1, 3, 8, 10 and 15 have also been amended to more clearly recite subject matter of the invention.

Independent claims 1 and 8 have been amended to incorporate the recitations of canceled claims 2 and 9, respectively. Claim 15 has been similarly amended. Amended claims 1, 8 and 15 now recite that each one of the captured images has one or more media types associated therewith, and that the icon area of the image cell displays graphical icons indicating the media types associated with each captured image.

Claims 16, 17, and 18 which are dependent on claims 1, 8, and 15, respectively, have been added to recite that the media types may include a still image, a burst image, a time lapse image, a panorama image, a movie clip, and sound.

Claims 3 and 10 have been amended to depend from claims 16 and 17, respectively, and to recite that each of the captured images are stored in a file format that includes compressed image data, thumb nail image data, and information

indicating the associated media types.

The Examiner rejected claims 1, 8, and 15 under 35 U.S.C. §103 as obvious over U.S. Patent No. 5,164,831 issued to Kuchta et al. in view of U.S. Pat. No. 5,633,678 issued to Parluski et al.; and rejected claims 2 and 9 under 35 U.S.C. §103 as obvious over Kuchta et al. in view of Parluski et al. and further in view of U.S. Pat. No. 5,124,814 issued to Takahashi et al.

Kuchta et al. discloses an image file for an electronic still camera wherein the file format stores both a high resolution image as well as a reduced resolution image. The reduced resolution image (thumbnail) is then quickly accessed from the file for rapid display.

Parluski et al. discloses an electronic still camera that categorizes images according to subject matter. The categories can be default identifiers or can be names, text (i.e., account number), and/or graphic overlays (i.e., company logo). After the user selects a particular category, the image is captured and any text and graphics associated with the category are overlaid onto the image (Col. 4, ln. 59 to Col. 5, ln. 3).

Takahashi et al. is related to a video tape recorder having an integrated camera, and a video camera each capable of recording a title and audio associated therewith. A menu of fixed titles is displayed for user selection. In response, the chosen title is inserted into the scene being displayed, and music or a voice associated with the selected title is recorded on a video cassette tape along with the title. As the title and music piece are being recorded on the tape, the title is supplied to the viewfinder so that a musical note symbol is displayed (Col. 5, Ins. 47-50).

In contrast to the references, the amended claims of the present invention are directed to a method and system for displaying images and multimedia type icons in the interface of a digital camera to indicate to the user what media types are associated with the images. The view finder of the camera displays a series of cells that represent

the digital images that have been captured. As disclosed in the specification, the camera is capable of not only capturing single still images, but also time lapse and burst images, movie clips, and a panoramas. Other media types may also be associated with a captured image, such as a slide show and a folder, for example. A slide show comprises several images stored sequentially in the same file, while a folder is one or more images stored in the directory or folder.

The present invention enables a user to distinguish among these different types of images by expanding the image cells to include an icon/information area for displaying one or more graphical icons and/or text information regarding the media type associated with the image. For a cell representing a slide show or folder, for example, the image area of the cell would display the first image in the group or a representative image from the folder, and the icon/information area would display a graphical icon representing a slide show or folder.

Referring now to the amended claims, claim 1 for example, now recites a method for displaying a series of images captured by a digital camera, which includes a view finder. The method includes the steps of storing each one of the captured images, each one of the captured images having one or more media types associated therewith; displaying a plurality of image cells in the view finder, wherein each of the image cells corresponds to one of the captured images; providing at least one of the image cells with an image area for displaying the corresponding captured image; providing the at least one image cell with an icon area for displaying additional information regarding the corresponding captured image; and displaying graphical icons in the icon area indicating the media types associated with the captured image.

It is respectfully submitted that the combination of Kuchta et al., Parulski et al., and Takahashi et al. fails to teach or suggest the features of claimed invention.

In the Office Action, the Examiner stated:

Kuchta discloses a digital camera which stores captured images and displays a mosaic of the images in a viewfinder. Each of the an image is shown in can be considered an 'image cell' which inherently has an 'image area' for displaying the image.

The Examiner, however, admits that Kuchta et al. "does not explicitly state that image information other than the image data may be shown on the display along with the image data." The Examiner then cited Parulski et al. for disclosing in figure 8 that:

each image cell includes an area for showing the image data, as well as an area ... for displaying additional information related to the image. This area can be considered an 'icon area' ... It would have been obvious to one of ordinary skill in the art to include an 'icon area' along with the images in the mosaic disclosed by Kuchta so as to convey additional information about the image to the user.

The Examiner then admits that:

...while Parulski et al. discloses that additional information in the form of text may be displayed along with the image, *Parulski does not explicitly state that icons corresponding to different media types may be displayed in the image cell.*" (emphasis added).

Finally, the Examiner cites Takahashi et al. to fill the void left by Parulski et al. stating that Takahashi discloses a camera that records image data as well as additional information regarding the image, where:

Figure 4 shows characters icons corresponding to a text medium and a sound icon corresponding to an audio medium displayed along with the image Based on this, it would have been obvious to store audio information as well as text information along with the image and display corresponding icons in the camera system disclosed by Kuchta.

Applicant respectfully disagrees.

It is well settled that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious...one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed

invention." In re Fritch, 972 F.2d 1260, 23 USPQ.2d 1780 (Fed. Cir. 1992).

Even with hindsight reconstruction, a combination of the references fail to teach or suggest, "storing each one of the captured images, each one of the captured images having one or more media types associated therewith," as recited in claim 1. For example, Parulski et al. discloses displaying additional information along with an image, but the information only pertains to category information, such as names and account numbers, for example, not the media types associated with the image. As recited in new claims 16, 17, and 18, the media types may include a still image, a burst image, a time lapse image, a panorama image, a movie clip, and sound. Indeed, it is believed Parulski fails to even teach that the camera may include images of different media types. And referring to Takahashi et al., Takahashi's teaching of recording audio and displaying an audio icon on the image only pertains to video images, which inherently have associated sound. Takahashi fails to teach or even contemplate other types of media images, such as still and time lapse images, for example, which may or may not have associated sound.

A combination of Parulski and Takahashi also fails to disclose "providing... image cells with an image area for displaying the corresponding captured image" and "...an icon area for displaying...graphical icons...indicating the media types associated with the captured image," as recited in independent claims 1, 8, and 15. Instead, Parulski et al. discloses displaying category information overlaid on top of the displayed image (see Col. 4, ln. 63; Col. 5., Ln. 3; and Col. 7, lns. 27-36), rather than displaying media icons in a separate part of the image cell from the image itself. The same holds true for Takahashi et al.

More specifically, none of the references, alone or in combination, discloses reserving a part of each image cell for displaying graphical icons indicating the media type associated with the image, while the remainder of the cell displays the entire image

unencumbered with text and/or graphics.

As stated above, Takahashi et al. is related to analog video tape recorders. It is submitted that one skilled in the art, who was attempting to solve the problem of image media identification in digital still cameras would not have any incentive or motivation to look for solutions to the problem in the art of analog video tape recorders. Therefore, it is believed Takahashi et al. is non-analogous art and cannot be combined with the other references to establish obviousness.

Assuming however, that Kuchta et al., Parulski et al., and Takahashi et al. were combined, as suggested by the Examiner, it is submitted the combination would fail to teach or suggest the claimed features of the present invention. The combination of the references would result in the display of a mosaic of image cells via Kuchta et al., where an image is displayed in entire cell. The image would include overlaid categorization information via Parulski et al., and be overlaid with an audio icon if the image included sound via Takahashi et al.

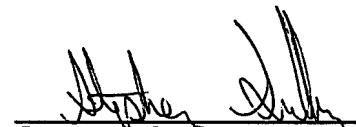
This system fails to overcome the problems solved by the present invention, which provides a system for indicating what media types are associated with images in a digital camera that is capable of capturing various types of media images, such as still, time lapse, burst, panorama, movie clips, and slide shows. This problem is solved by 1) providing each image cell with "an image area for displaying the corresponding captured image" and by 2) providing the image cell with "an icon area for displaying additional information regarding the corresponding captured image," where the icon area displays "graphical icons indicating the media types associated with the captured image," as recited in the independent claims of the present invention.

In view of the foregoing, it is submitted that independent claims 1, 8, and 15 are allowable over the cited references. It is also submitted that claims 3 -7, and 10-14, and 16-18 are allowable because they are dependent upon the allowable independent

claims. Accordingly, Applicant respectfully requests reconsideration and passage to issue of claims 1, 3-8, and 10-18 as now presented.

Applicants' attorney believes that this Application is in condition for allowance. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted,



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